


PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

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| Applicant's or agent's file reference 100852-59139-PT/TM | | FOR FURTHER ACTION | | See Form PCT/IPEA/416 |
| International application No. PCT/HU2004/000103 | | International filing date (day/month/year) 04.11.2004 | | Priority date (day/month/year) 04.11.2003 |
| International Patent Classification (IPC) or national classification and IPC A61B5/00 | | | | |
| Applicant SZEGEDI TUDOMANYEGYETEM et al. | | | | |
| <p>1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 4 sheets, including this cover sheet.</p> <p>3. This report is also accompanied by ANNEXES, comprising:</p> <p>a. <input checked="" type="checkbox"/> sent to the applicant and to the International Bureau) a total of 1 sheets, as follows:</p> <p><input checked="" type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</p> <p><input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</p> <p>b. <input type="checkbox"/> (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) , containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</p> | | | | |
| <p>4. This report contains indications relating to the following items:</p> <p><input checked="" type="checkbox"/> Box No. I Basis of the opinion</p> <p><input type="checkbox"/> Box No. II Priority</p> <p><input type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p><input type="checkbox"/> Box No. IV Lack of unity of invention</p> <p><input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p><input type="checkbox"/> Box No. VI Certain documents cited</p> <p><input type="checkbox"/> Box No. VII Certain defects in the international application</p> <p><input type="checkbox"/> Box No. VIII Certain observations on the international application</p> | | | | |
| Date of submission of the demand 26.05.2005 | | Date of completion of this report 20.10.2005 | | |
| Name and mailing address of the international preliminary examining authority:  European Patent Office - Gitschiner Str. 103 D-10958 Berlin Tel. +49 30 25901 - 0 Fax: +49 30 25901 - 840 | | Authorized Officer Bernas, Y Telephone No. +49 30 25901-558 | | |



**INTERNATIONAL PRELIMINARY REPORT
ON PATENTABILITY**

International application No.
PCT/HU2004/000103

Box No. I Basis of the report

1. With regard to the **language**, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
- ☐ This report is based on translations from the original language into the following language , which is the language of a translation furnished for the purposes of:
- ☐ international search (under Rules 12.3 and 23.1(b))
 - ☐ publication of the international application (under Rule 12.4)
 - ☐ international preliminary examination (under Rules 55.2 and/or 55.3)
2. With regard to the **elements*** of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:

Description, Pages

1-11 as originally filed

Claims, Numbers

1-8 received on 16.07.2005 with letter of 06.07.2005

Drawings, Sheets

1/2, 2/2 as originally filed

- ☐ a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing
3. ☐ The amendments have resulted in the cancellation of:
- ☐ the description, pages
 - ☐ the claims, Nos.
 - ☐ the drawings, sheets/figs
 - ☐ the sequence listing (*specify*):
 - ☐ any table(s) related to sequence listing (*specify*):
4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
- ☐ the description, pages
 - ☐ the claims, Nos.
 - ☐ the drawings, sheets/figs
 - ☐ the sequence listing (*specify*):
 - ☐ any table(s) related to sequence listing (*specify*):

* If item 4 applies, some or all of these sheets may be marked "superseded."

**INTERNATIONAL PRELIMINARY REPORT
ON PATENTABILITY**

International application No.
PCT/HU2004/000103

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

| | | |
|-------------------------------|-------------|-----|
| Novelty (N) | Yes: Claims | 1-8 |
| | No: Claims | |
| Inventive step (IS) | Yes: Claims | 1-8 |
| | No: Claims | |
| Industrial applicability (IA) | Yes: Claims | 1-8 |
| | No: Claims | |

2. Citations and explanations (Rule 70.7):

see separate sheet

**INTERNATIONAL PRELIMINARY
REPORT ON PATENTABILITY
(SEPARATE SHEET)**

International application No.

PCT/HU2004/000103

Re Item V

**Reasoned statement with regard to novelty, inventive step or industrial applicability;
citations and explanations supporting such statement**

The subject-matter of claim 1 is new and viewed as inventive since it allows a simpler construction as in US5423320 by the use of single material permeable to gases and impermeable to fluids.

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CLAIMS

1. A tonometric device (20) for examination of respiratory insufficiency and regional tissue perfusion failure in patients comprising a distal end (22) for introducing into the gastrointestinal tract of the body of a patient, a section (24) to be introduced into the body, and a section (3) for fixing the position of the device to the patient, wherein the section to be introduced (24) comprises a first tube (1) to which an additional tubing (4) is connected, characterized in that it comprises a second tube (2) arranged substantially parallel with and fixed to the first tube (1), wherein the distal end (22) of the second tube (2) is in communicating connection with the first tube (1), and the first tube (1) and the second tube (2) are made of a material readily permeable for gases, especially for carbon dioxide but substantially impermeable for body fluids and other substances, preferably of silicone rubber, and an additional tubing (5) is connected to the second tube (2).

2. A device as claimed in claim 1, wherein the diameter of the first and second tubes (1, 2) is substantially constant between the distal end (22) and the fixing section (3).

3. A device as claimed in claim 1, wherein the additional tubings (4, 5) are provided with connecting means (6, 7).

4. A device as claimed in claim 3, wherein the connecting means (6, 7) are constructed for connecting them to the connecting stub of a medical syringe.

5. A device as claimed in claim 1, wherein the outer diameter of the tubes (1, 2) ranges from 1 to 4 mm and the wall thickness ranges from 0.3 to 1.0 mm.

6. A device as claimed in claim 5, wherein the outer diameter of the first tube (1) ranges from 2 to 4 mm and its wall thickness from 0.5 to 1.0 mm, and the outer diameter of the second tube (2) ranges from 1.0 to 1.5 mm and its wall thickness from 0.3 to 0.5 mm.

7. A device as claimed in claim 1, wherein the second tube (2) is built together with the first tube (1), or the second tube (2) is formed as a second passage (2') in the wall surrounding the passage (1') of the first tube (1).

8. A device as claimed in claim 1, wherein the additional tubings (4, 5) are connected to each other and form a closed system with the tubes (1, 2), wherein the closed system is filled up with an indicator-containing liquid suitable for detecting carbon-dioxide concentration.